Automated and Scalable Machine Learning on Imperfect PMU Data for Robust Event Diagnostics

Track 2 – Data Analysis Automation

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Challenges & Motivations:

- Incomplete and noisy TBs of PMU measurements
- Incomplete event logs and inaccurate event timestamps
- Incomplete and noisy event labels

Research Question to Answer & Technology to Develop:

 how can we develop good ML models using such imperfect TBs of PMU data in an automated and scalable way for system operators' use cases?

Outcome for Utilities and system operators:

to develop automated and scalable ML methods for robust event diagnostics using large amounts of imperfect PMU data.

Project Goal:

 to reliably identify key events and discover new insights about events and grid characteristics hiding in PMU datasets.

